

Using “screen” as terminal emulator under UNIX/LINUX

To start a session, type “screen” followed by the serial device name and baud rate:

```
Unix prompt> screen /dev/ttyUSB0 9600
```

To get to screen commands, type ctrl-a followed by a command character. To see a list of commands, type ctrl-a ? (no space after ctrl-a, ctrl is not held for ?).

To exit the current screen, type ctrl-a k

To exit all screens (if multiple started by mistake), type ctrl-a \
Some versions of screen may require ctrl-a ctrl-\

To send a file with XMODEM, type ctrl-a : (colon is the command character), then at the prompt, type:

```
exec !! sx filename
```

Use “sx -a filename” to convert single new-line characters to CR/LF pairs.

To receive a file with XMODEM, type ctrl-a : (colon is the command character), then at the prompt, type:

```
exec !! rx filename
```

Use “rx -a filename” to convert CR/LF pairs to single new-line characters.

Note: The first ! routes stdin through screen’s input connection. The second ! routes stdout through screen’s output connection.

To change the baud rate prior to an XMODEM transfer, type ctrl-a : (colon is the command character), then at the prompt, type:

```
exec !! stty new_baud_rate
```

Alternatively, exit screen by typing ctrl-a k, then re-start screen at the new baud rate (e.g.):

```
Unix prompt> screen /dev/ttyUSB0 new_baud_rate
```

To simply send an ASCII or binary file (i.e., XMODEM not used), type ctrl-a : (colon is the command character), then at the prompt, type:

```
exec !! cat filename
```

Or to convert new-line to CR/LF pairs, type:

```
exec !! cat filename | unix2dos
```

To start a session and enable hardware handshaking (e.g., to use the Model 15 Teletype Interface), type “screen” followed by the serial device name, baud rate, and the handshake parameter. The comma is required.

```
Unix prompt> screen /dev/ttyUSB0 9600,crtscts
```